

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION

ILUMI SOLUTIONS, INC. d/b/a	§	
MESHTEK LABS, INC.	§	
	§	
v.	§	CIVIL NO. 4:23-CV-937-SDJ
	§	
GEMSTONE LIGHTS CANADA	§	
LTD.	§	

**MEMORANDUM OPINION AND ORDER**

Plaintiff Ilumi Solutions, Inc. (“Ilumi”) alleges that Defendant Gemstone Lights Canada Ltd. (“Gemstone”) has infringed and continues to infringe six of its patents: U.S. Patent Nos. 8,890,435 (the “435 Patent”), 8,922,126 (the “126 Patent”), 9,295,144 (the “144 Patent”), 8,742,694 (the “694 Patent”), 8,896,218 (the “218 Patent”), and 8,896,232 (the “232 Patent”) (collectively, the “Asserted Patents”). In general, the Asserted Patents relate to lighting control systems that allow for controlling “the color and brightness” of certain LED lights “using a wireless interface.” ’435 Patent at 1:53–57, Title.

The Court must determine the proper construction of disputed terms in the Asserted Patents. The parties have submitted claim-construction briefing, (Dkt. #24, #26, #29, #30, #31), and the Court held a Markman hearing to further explore the parties’ positions. Having considered the briefing, the parties’ arguments at the Markman hearing, the intrinsic and extrinsic evidence, and the applicable law, the Court issues this Claim Construction Order. *See Teva Pharms. USA v. Sandoz, Inc.*, 574 U.S. 318, 331–32, 135 S.Ct. 831, 190 L.Ed.2d 719 (2015); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc).

## I. BACKGROUND

Gemstone identifies fifteen different claim terms for construction. Many of Gemstone's arguments are based on portions of the specification that were deleted by amendment and thus are not part of the issued specifications. For its part, Ilumi contends that none of those terms require construction and that all terms should be given their plain and ordinary meaning. While plain and ordinary meaning is appropriate for some terms, it is not appropriate for all terms.

This Order provides the Court's final constructions and supporting analysis.

### *The '435 Patent*

The '435 Patent, titled "Wireless lighting control system," was filed on March 11, 2012, and issued on November 18, 2014. The abstract describes the invention of the '435 Patent as follows:

A lighting device includes a DC/DC power converter, a controller/processor electrically connected to the DC/DC power converter, a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the DC/DC power converter, and two or more LEDs comprising at least a first color LED and a second color LED electrically connected to the LED current control circuit. The LED current control circuit provides an on/off signal having a cycle time to each LED in response to one or more control signals received from the controller/processor such that the two or more LEDs produce a blended light having a specified color based on how long each LED is turned ON and/or OFF during the cycle time.

'435 Patent at Abstract. Claim 1 of the '435 Patent is a representative claim:

1. A lighting system, comprising in combination:  
one or more intelligent lights, wherein each intelligent light includes a variable lighting, a memory, a processor and a wireless interface;  
the variable lighting comprises one or more first color LEDs and one or more second color LEDs;

a user device providing a user interface which is in communication with the one or more intelligent lights, wherein a user uses the user interface on the user device to send a program or a command to each intelligent light of one or more of intelligent lights; and

each intelligent light produces a variable color in response to the program or the command from the user device by turning the variable lighting on and off at one or more specified frequencies using the processor;

the one or more specified frequencies comprise a first on/off signal having a first cycle time and a second on/off signal having a second cycle time; and

the processor sends the first on/off signal having the first cycle time to the first color LEDs and the second on/off signal having the second cycle time to the second color LEDs such that a first light produced by the first cycle time of the first LEDs and a second light produced by the second cycle time of the second LEDs combine together to produce the variable color programmed by the user device.

### ***The '126 Patent***

The '126 Patent, titled "Wireless lighting control system," was filed on March 15, 2013, and issued on December 30, 2014. It has the same abstract as the '435 Patent. Claim 1 of the '126 Patent is a representative claim:

1. A lighting system, comprising in combination:  
 an AC/DC or DC/DC power converter;  
 a controller/processor electrically connected to the AC/DC or DC/DC power converter;  
 a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the AC/DC or DC/DC power converter;  
 two or more LEDs comprising at least a first color LED and a second color LED electrically connected to the LED current control circuit;  
 a real time clock circuit communicably coupled to the controller/processor; and  
 wherein the LED current control circuit provides an on/off signal having a cycle time to each LED in response to one or more control signals received from the controller/processor such that the two or more LEDs produce a blended light having a specified color based on how long each LED is turned ON and/or OFF during the cycle time.

### ***The '144 Patent***

The '144 Patent, titled "Wireless lighting control system," was filed on March 11, 2013, and issued on March 22, 2016. The abstract describes the invention of the '144 Patent as follows:

A lighting device includes a AC/DC or DC/DC power converter, a controller/processor electrically connected to the AC/DC or DC/DC power converter, a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the AC/DC or DC/DC power converter, and one or more LEDs electrically connected to the LED current control circuit.

'144 Patent at Abstract. Claim 1 of the '144 Patent is a representative claim:

1. A lighting device comprising:  
a housing;  
an AC/DC or DC/DC power converter disposed within the housing;  
a controller/processor electrically connected to the AC/DC or DC/DC power converter and disposed within the housing;  
a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the AC/DC or DC/DC power converter and disposed within the housing; and  
one or more LEDs electrically connected to the LED current control circuit and disposed proximate to or within an aperture of the housing.

### ***The '694 Patent***

The '694 Patent, titled "Wireless lighting control system," was filed on March 15, 2013, and issued on June 3, 2014. It has the same abstract as the '435 Patent.

Claim 1 of the '694 Patent is a representative claim:

1. A lighting device comprising:  
an AC/DC or DC/DC power converter;  
a controller/processor electrically connected to the AC/DC or DC/DC power converter;  
a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the AC/DC or DC/DC power converter;

two or more LEDs comprising at least a first color LED and a second color LED electrically connected to the LED current control circuit;  
 wherein the LED current control circuit provides an on/off signal having a cycle time to each LED in response to one or more control signals received from the controller/processor such that the two or more LEDs produce a blended light having a specified color based on how long each LED is turned ON and/or OFF during the cycle time;  
 a wireless transceiver circuit communicably coupled to the controller/processor;  
 an antenna communicably coupled to the wireless transceiver circuit;  
 wherein the controller/processor communicates with one or more other lighting devices, remote controllers, sensors, other devices, or a combination thereof;  
 wherein the lighting device and the other lighting devices are part of a mesh network, a group or a combination thereof; and  
 wherein the controller/processor provides a status information from the other lighting devices, remote controllers or other devices within the mesh network or group.

### ***The '218 Patent***

The '218 Patent, titled "Wireless lighting control system," was filed on March 15, 2013, and issued on November 25, 2014. It has the same abstract as the '435 Patent. Claim 1 of the '218 Patent is a representative claim:

1. A lighting device comprising:  
 a flexible strip;  
 an electrical connector affixed to the flexible strip;  
 an AC/DC or DC/DC power converter;  
 a controller/processor electrically connected to the AC/DC or DC/DC power converter;  
 a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the AC/DC or DC/DC power converter;  
 two or more LEDs comprising at least a first color LED and a second color LED electrically connected to the LED current control circuit;  
 wherein the two or more LEDs are affixed to the flexible strip and electrically connected to the electrical connector;  
 wherein the AC/DC or DC/DC power converter, the controller/processor and the LED current control circuit are remotely located with respect to

the flexible strip and electrically connected to the electrical connector via a wire, a cable or a connecting strip; and  
 wherein the LED current control circuit provides an on/off signal having a cycle time to each LED in response to one or more control signals received from the controller/processor such that the two or more LEDs produce a blended light having a specified color based on how long each LED is turned ON and/or OFF during the cycle time.

### ***The '232 Patent***

The '232 Patent, titled "Wireless lighting control system," was filed on March 15, 2013, and issued on November 25, 2014. It has the same abstract as the '435 Patent. Claim 1 of the '232 Patent is a representative claim:

1. A lighting device comprising:  
 an AC/DC or DC/DC power converter;  
 a controller/processor electrically connected to the AC/DC or DC/DC power converter;  
 a light emitting diode (LED) current control circuit communicably coupled to the controller/processor and electrically connected to the AC/DC or DC/DC power converter;  
 two or more LEDs comprising at least a first color LED and a second color LED electrically connected to the LED current control circuit;  
 wherein the LED current control circuit provides an on/off signal having a cycle time to each LED in response to one or more control signals received from the controller/processor such that the two or more LEDs produce a blended light having a specified color based on how long each LED is turned ON and/or OFF during the cycle time;  
 wherein the controller/processor executes one or more programs to control the LED current control circuit to produce a light in accordance with the one or more programs; and  
 wherein the one or more programs comprise one or more default programs, one or more user created programs, or a combination thereof.

## **II. LEGAL STANDARD**

Claim terms are generally given their plain and ordinary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014), *vacated on other grounds*, 575 U.S.

959, 959 (2015) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (internal quotation omitted). The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips*, 415 F.3d at 1313.

The “only two exceptions to this general rule” are when the patentee (1) acts as their own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). The Federal Circuit has counseled that “[t]he standards for finding lexicography and disavowal are exacting.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). Indeed, to act as their own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term” and “‘clearly express an intent’ to [define] the term.” *Thorner*, 669 F.3d at 1365.

But while a statement of lexicography or disavowal must be exacting and clear, it need not be “explicit.” See *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016) (“[A] patent applicant need not expressly state ‘my invention does not include X’ to indicate his exclusion of X from the scope of his patent . . .”). Lexicography or disavowal can thus be implied when the patentee makes clear statements characterizing the scope and purpose of the invention. See *On Demand Mach. Corp. v. Ingram Indus.*, 442 F.3d 1331, 1340 (Fed. Cir. 2006) (“[W]hen the scope of the invention is clearly stated in the specification, and is described as the advantage and distinction of the invention, it is not necessary to disavow explicitly a

different scope.”). But if the patentee expresses neither an explicit or implied lexicography or disavowal, the plain meaning generally governs. *Trs. of Columbia Univ.*, 811 F.3d at 1364 n.2.

Outside of these exceptions, the Federal Circuit has also found that plain and ordinary meaning is inappropriate when a term has more than one ordinary meaning or when reliance on a term’s ordinary meaning does not resolve the parties’ dispute. *O2 Micro Int’l v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008). In that case, the court must explain what the plain and ordinary meaning is. *Id.*

To discern the plain meaning of a given claim term, courts often look to the specification. “Although the specification may aid the court in interpreting the meaning of disputed claim language . . . particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

“Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.” *Phillips*, 415 F.3d at 1317. In “distinguishing the claimed invention over the prior art, an applicant is indicating what a claim does not cover.” *Spectrum Int’l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1379 (Fed. Cir. 1998). The doctrine of prosecution disclaimer thus precludes a



patentee from recapturing a specific meaning that was previously disclaimed during prosecution. *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). “[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable.” *Id.* at 1325–26. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

Outside of the intrinsic evidence—the claims, the specification, and the prosecution history—courts also look to extrinsic evidence, like technical dictionaries or expert testimony. Although extrinsic evidence can be useful, it is “less significant than the intrinsic record in determining ‘the legally operative meaning of claim language.’” *Phillips*, 415 F.3d at 1317 (quotations omitted). For instance, technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent. *Id.* at 1318. Expert testimony may also be helpful, but an expert’s conclusory or unsupported assertions as to the meaning of a term are not. *Id.*

### III. CLAIM CONSTRUCTION

#### A. Lighting/Light Terms

The parties group five terms related to “lighting” or “light” together for purposes of claim construction. Ilumi contends that all terms should be given their plain and ordinary meaning, while Gemstone proposes a lengthy construction for all five terms. These terms are as follows:

1. “intelligent light” (’435 Patent, Claim 1)
2. “a lighting system” (’435 Patent, Claim 1, preamble)
3. “lighting device” (’232 Patent, Claim 1, preamble), (’694 Patent, Claim 1, preamble and body), (’126 Patent, Claim 1, preamble), (’218 Patent, Claim 1, preamble), (’144 Patent, Claim 1, preamble)
4. “light” (neither party identifies where this term is used separately from the above terms and there is no argument directed to this term on its own)
5. “lighting” (neither party identifies where this term is used separately from the above terms and there is no argument directed to this term on its own)

(Dkt. #31-1). Because the Court construes “intelligent light” differently than the other four terms, it addresses this term first.

**1. “intelligent light” (’435 Patent, Claim 1)**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	a system or device which contains one or more smart bulbs or strips for sending and receiving information wirelessly, with each of intelligent light bulbs or strips having: a connector/fastener to a separate power source or supply, an AC/DC power converter or a DC/DC power converter, real time clock circuitry, a controller/processor, memory, wireless transceiver circuitry, an antenna, LED current controlling circuitry and LEDs (light emitting diodes)	wirelessly enabled light

**i. Analysis**

Gemstone’s proposed construction of “intelligent light”—incorporating what it refers to as the “critical components,” (Dkt. #29 at 6–9)—relies on a lexicographer theory.<sup>1</sup> This theory depends on language from the originally filed specification for the ’435 Patent, which lists the “critical components” of a “Smart light,” and states that they “must be present in all smart lights.” (Dkt. #29 at 6–7). Because of the phrase “must be present,” Gemstone argues that “[t]his is the ‘definition’ of a smart light.” (Dkt. #29 at 7). And because later amendments changed “smart light” references to either an “intelligent illuminating device” or an “intelligent light,” (Dkt. #29 at 7–8), a smart light is synonymous with an intelligent light. To close this theory out, Gemstone suggests that because amendments made during patent prosecution cannot add new matter, the specification as filed must have the same scope as the specification as issued. (Dkt. #29 at 8–9). So even if the “critical components” language is absent in the specification as issued, Gemstone believes it must be inherently present and thus limiting on the claims.

Ilumi disagrees, countering that this language was intentionally “whole-sale removed from the [application for the ’435 Patent] immediately after the filing and following a change in prosecution counsel.” (Dkt. #30 at 5). Ilumi also points out that this language is not “part of the specification as issued, was not altered or removed following on Office action, or in response to overcoming any prior art, and was not even considered by the Examiner when ultimately allowing the claims at issue.”

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<sup>1</sup> While Gemstone appears to suggest a potential disavowal theory, (Dkt. #29 at 13), the Court fails to appreciate what that theory is and won’t speculate.

(Dkt. #30 at 5–6) (internal footnotes omitted). The best construction of intelligent light, according to Illumi, is plain and ordinary meaning. (Dkt. #26 at 10).

The Court disagrees with the proposed constructions of both parties. To begin with, Gemstone’s lexicographer theory has at least three problems. First, Gemstone fails to cite any precedent, and the Court is unaware of any authority, that permits superseded portions of the specification to be treated as part of the issued specification for the purposes of claim construction. A patent has only one operative specification—the specification as issued. Of course, the prosecution history may help elucidate the patentee’s views on the scope of the invention when changes are made in response to examiner rejections. But the Court fails to see what insights, if any, can be gleaned from specification language removed by preliminary amendment before examination began.

Second, Gemstone fails to explain why the examiner’s allowance of Illumi’s preliminary amendment mandates that the specification inherently includes the critical-components language. To be sure, an examiner has a duty to ensure that preliminary amendments don’t *add* new matter to a specification. *See* 35 U.S.C. § 132 (prohibiting amendments that add new matter); *see also Anascope, Ltd. v. Nintendo of Am., Inc.*, 601 F.3d 1333, 1336 (Fed. Cir. 2010) (finding that an amended specification with new matter was not entitled to original priority date). But a patentee can certainly *remove* matter from a specification when that removal does not broaden the scope of the specification. In fact, this is done frequently when patentees file divisional applications, which take distinct inventions from one parent

application and split them into separate applications. *See, e.g.*, Manual of Patent Examining Procedure § 201.06 (9th ed. Rev. 8, Feb. 2023) (requiring that a divisional application “set forth at least *the portion of the earlier disclosure* that is germane to the invention as claimed in the divisional application”) (emphasis added).

That said, removing matter from a specification may violate the prohibition against new matter if that removal broadens the claimed invention. *See, e.g., Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338 (Fed. Cir. 2008). But given the facts in *Baldwin*—the case Gemstone relies on for this proposition—the Court struggles to understand why that reasoning applies here.

In *Baldwin*, the patentee submitted an amendment during reexamination that attempted to broaden the specification and claims by changing all references of “heat sealing” to just “sealing.” *Id.* at 1340. The examiner rejected the amendment on new-matter grounds, and the patentee withdrew the amendment. *Id.* at 1341. Years later, this patent was being construed in litigation. *Id.* at 1340. During claim construction, the patentee similarly argued that the claimed sealed sleeve need not be a heat-sealed sleeve. *Id.* at 1341. The district court disagreed, citing the patentee’s rejected and withdrawn amendment. *Id.* On appeal, the Federal Circuit affirmed the district court’s construction, finding that the examiner “rightly refused to allow the applicants to amend the specification to remove references to ‘heat’ as the way of sealing the sleeve.” *Id.* at 1344.

None of the relevant facts in *Baldwin* is present here. The amendment referenced by Gemstone here is a preliminary amendment made before examination

began. The examiner never suggested that this amendment included new matter. Nor did he reject it. Nor did Ilumi withdraw it. Thus, the Court finds that the reasoning of *Baldwin* does not apply here.

Third, Gemstone’s lexicographer theory runs headlong into the doctrine of claim differentiation, which presumes that “each claim in a patent has a different scope.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998). Indeed, when “the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant.” *Id.* (quotations omitted). Under claim differentiation, claim 1 cannot include some of the alleged “critical components” because they are claimed by dependent claims. For example, claim 26 includes an AC/DC power converter or a DC/DC power converter. Or look at claim 9, which includes “a real time clock.” In short, construing intelligent light to include the critical components—including the components that distinguish claims 9 and 26 from claim 1—would render these dependent claims superfluous, which further contradicts Gemstone’s construction.

All in all, the Court sees no reason to adopt Gemstone’s suggestion, whether it considers the claims, the specification, or Gemstone’s cited authorities. That said, the Court disagrees with Ilumi that “intelligent light” should be construed to have its plain and ordinary meaning.<sup>2</sup> In this regard, the specification provides guidance on

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<sup>2</sup> While both parties cited several cases related construing similar light-related terms, (Dkt. #26 at 10–11); (Dkt. #29 at 12), these constructions are of limited help because none of them construes the phrase “intelligent light.” And even if they did, claim construction is such

the meaning of “intelligent”<sup>3</sup>: “An [Intelligent Illuminating] Device is a single wirelessly enabled lighting apparatus.” ’435 Patent at 6:32–33, *see also id.* at 6:19–25 (discussing an Intelligent Illuminating Device “utilizing a wireless communication protocol”). Thus, the specification teaches that wireless connectivity is what makes a lighting device “intelligent.”

## ii. Court’s Construction

The Court finds lexicography for “intelligent light” can be implied because the patentee made “clear statements characterizing the scope . . . of the invention.” *On Demand Mach. Corp.*, 442 F.3d at 1340. The Court therefore construes “intelligent light” as “wirelessly enabled light.”

2. **“a lighting system” / “lighting device” / “light” / “lighting”** (’435 Patent, Claim 1, preamble) (’232 Patent, Claim 1, preamble), (’694 Patent, Claim 1, preamble and body), (’126 Patent, Claim 1, preamble), (’218 Patent, Claim 1, preamble), (’144 Patent, Claim 1, preamble)

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	a system or device which contains one or more smart bulbs or strips for sending and receiving information wirelessly, with each of intelligent light bulbs or strips having: a connector/fastener to a separate power source or supply, an AC/DC	Plain and ordinary meaning.

a context-specific endeavor that the meaning of the same phrase in two similar patents can vary significantly.

<sup>3</sup> *See Phillips*, 415 F.3d at 1316 (the specification is “the single best guide to the meaning of a disputed term”).

	power converter or a DC/DC power converter, real time clock circuitry, a controller/processor, memory, wireless transceiver circuitry, an antenna, LED current controlling circuitry and LEDs (light emitting diodes)	
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### **i. Analysis**

Like the construction for “intelligent light,” Gemstone’s construction for these terms relies on language plucked from the superseded specification of the ’435 Patent. (Dkt. #29 at 11–13). As discussed above, the Court finds those arguments unpersuasive. In addition, several of these terms are found in the preambles of various claims. Yet Gemstone does not argue that the preambles are limiting. How can it be, then, that the Court must import this laundry list of limitations into the preambles while that importation has no effect on the scope of the claims. The answer, of course, is that it can’t. Because this construction would only inject ambiguity into the claims, the Court refuses to adopt it.

### **ii. Court’s Construction**

Since claim terms are typically given their plain and ordinary meaning, *Thorner*, 669 F.3d at 1365, and these light- or lighting-related terms are common and would be readily understandable by a jury, the Court finds that plain and ordinary meaning is appropriate.



**B. “first color LEDs” / “second color LEDs” (’435 Patent, Claim 1) (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1)<sup>4</sup>**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	Means different types of LEDs, i.e. two or more different types selected from red LEDs, green LEDs, blue LEDs, white LEDs and multicolor (e.g., RGB) LEDs	Plain and ordinary meaning, in which the first color LED displays a different color than the second color LED.

**1. Analysis**

Gemstone argues that these terms require two LEDs with different types of LED structures. (Dkt. #29 at 15) (“In other words, the claim language itself makes clear each intelligent light includes two (or more) LEDs having *different structures from one another*.”) (emphasis added). In support, Gemstone cites a line in the specification describing how the two claimed LEDs can be selected from a set of different-colored LEDs. (Dkt. #29 at 15). Because different colored LEDs presumably have different structures, the argument goes, the claim must require different LED types. (Dkt. #29 at 14).

Ilumi disagrees, noting that “the phrase ‘different structures’ does not even appear in the specification.” (Dkt. #30 at 7). What is more, nothing in the specification requires different colors for the two LEDs. (Dkt. #30 at 7). And even if the Court

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<sup>4</sup> The parties also identify Claim 12 of the ’144 Patent as including this term. (Dkt. #31-1 at 13). The term identified in Claim 12 of the ’144 Patent is a different term and recites “the one or more LEDs comprising two or more LEDs having different colors.” *Id.* This term was neither identified for construction in the Claim Construction and Prehearing Statement, (Dkt. #24), nor briefed by the parties. This memorandum therefore does not construe it.

believes that Gemstone's cited embodiments include such an implication, reading those limitations into the claims would be improper. (Dkt. #26 at 13–14) (quoting *Liebel-Flarsheim*, 358 F.3d at 913).

The Court agrees with Ilumi: Gemstone has provided no support for importing limitations from a preferred embodiment into the claims. *Liebel-Flarsheim*, 358 F.3d at 913. But even setting that aside, the example Ilumi provides shows why Gemstone's "different types" language is improper. If two identical tri-color LEDs were selected, one LED could be used to create a first color, while the second LED could be used to create a second color. Gemstone points to nothing that precludes such an arrangement; and the Court finds nothing so limiting.

That said, the Court disagrees with Ilumi's suggestion that the LED colors could be the same. Instead, the Court finds that the colors *displayed* by the two claimed LEDs must be different. Otherwise, they would not be able to produce the "variable color" contemplated by the claims. If you had two red LEDs, for example, no matter what amperage flows through those LEDs, they would be able to produce only one color: red. The same is true when the frequency is varied. Thus, the Court finds that an arrangement of two LEDs that display the same color would fall outside of the claims and the plain and ordinary meaning. The specification buttresses this finding because it discusses creating blended light of a specified color based on turning the two LEDs on and off at different times. '435 Patent at 19:60–66, 13:11–38 (discussing the creation of specified colors using multiple color LEDs), 16:47–51 (same).

## 2. Court’s Construction

In general, absent evidence of lexicography or disavowal, the Court construes terms to have their plain and ordinary meaning. But when the plain and ordinary meaning does not resolve the parties’ dispute, the Court must explain what the plain and ordinary meaning is. *O2 Micro*, 521 F.3d at 1361. Therefore, the Court construes the plain and ordinary meaning of a “first color LED” and a “second color LED” to require the first color LED to display a different color than the second color LED.

### C. “variable color” / “blended light” (’435 Patent, Claim 1)

The parties treat these terms together. But they are different terms. The term “variable color” appears in only the claims of the ’435 Patent. It does not appear in the specification. The term “blended light” appears in the claims of the ’232 Patent, the ’694 Patent, the ’126 Patent, and the ’218 Patent. It is also used throughout the specification. Gemstone identifies both terms as being part of larger phrases within certain claims but only proposes a specific construction for “variable color.” The Court thus addresses these terms separately.

#### 1. “variable color” (’435 Patent, Claim 1)

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	The result of two or more different types of LEDs creating a color by using different values for each LED.	a color with variable properties

##### i. Analysis

Gemstone argues that “this limitation involves blending or providing variable color from two different types of LEDs.” (Dkt. #29 at 16). According to Gemstone, “this

dispute is simply about whether the variable color is one that can be[] a) the product of two LEDs of the same type, or b) whether the claimed variable color is the result of two different lights (i.e., two different values) from those two different LEDs.” (Dkt. #29 at 16). Ilumi argues that “neither the claims nor the specifications require ‘different types’ of LEDs or ‘different values.’” (Dkt. #30 at 7–8).

Whether the claims require different types of LEDs stems from the previous limitation. *See supra* Part III.B.1. For the same reasons provided above, the Court rejects that argument. Gemstone also provides no explanation for why different “values” are required, or, more fundamentally, what these different values even are. The specification only uses the word twice; neither occurrence sheds any light on this ambiguity. The Court therefore rejects this construction.

Even so, the intrinsic evidence suggests that “variable color” has a different meaning than the simple combination of the words “variable” and “color.” For example, claim 2 of the ’435 Patent recites “wherein the *variable color comprises* a specified color, a specified saturation, a specified brightness or intensity, *or* a combination thereof.” (emphases added). Claim 2 makes clear that “variable color” is not limited to “a specified color,” but has other variable properties like saturation or brightness. Other references in the specification confirm this understanding: “by varying PWM signal duty cycle for four LEDs Drivers . . . II Device 140 could produce any color with different shades,” and allows “for all combinations of color, brightness, and saturation.” ’435 Patent 10:50–60.

## ii. Court’s Construction

The Court finds lexicography for “variable color” can be implied because the patentee made “clear statements characterizing the scope . . . of the invention.” *On Demand Mach. Corp.*, 442 F.3d at 1340. The Court construes “variable color” as “a color with variable properties.”

## 2. “blended light” (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1)

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	The result of two or more different types of LEDs creating a color by using different values for each LED.	Plain and ordinary meaning.

## i. Analysis

The parties make the same arguments about this term as they do for “variable color.” And for the same reasons above, the Court rejects Gemstone’s suggestion that different LED types and values are required. While there was evidence in the specification that “variable color” did not take on its plain and ordinary meaning, no such evidence exists for blended light.

## ii. Court’s Construction

Since claim terms are typically given their plain and ordinary meaning, *Thorner*, 669 F.3d at 1365, and “blended light” is a common phrase that would be readily understandable by a jury, the Court finds that plain and ordinary meaning is appropriate.

**D. “turning the variable lighting on and off at one or more specified frequencies” (’435 Patent, Claim 1) (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1)**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	using pulse width modulation to vary the on and off time for two different LEDs to provide the variable lighting	Plain and ordinary meaning.

**1. Analysis**

Although the parties suggest that this term relates to several patents, it only appears in the claims of the ’435 Patent. The dispute appears to be whether pulse-width modulation is the only means for turning LEDs on and off at a specific frequency or during a specific cycle time. (Dkt. #29 at 18–19); (Dkt. #30 at 8–9).

To the extent that Gemstone relies on the superseded specification, the Court is unpersuaded for the same reasons it provided above. *See supra* Part III.A.1.i. And although the specification describes using “Pulse Width Modulation (PWM)” in various embodiments,<sup>5</sup> Gemstone has not identified any evidence of lexicography or disavowal that would support limiting the ’435 Patent to the use of pulse-width modulation. And the specification has other embodiments that discuss other ways to “vary and alternate the length of time that the multiplexer signals are turned on” to “create variations in lengths of time when the LEDs produce light.” ’435 Patent 16:51–61, Fig. 7. As another example, “current limiting circuits,” formed by using a

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<sup>5</sup> *See, e.g.*, ’435 Patent at 11:15–21, 14:11–15.

“digital potentiometer,” could be used “to control the current passed through to each LED.” *Id* at 17:22–50, Fig. 8.

Along with failing to explain why only one of the methods listed in the specification should be imported into the claim limitations, Gemstone fails to explain why any of these methods should be imported. *Liebel-Flarsheim*, 358 F.3d at 913 (“[I]t is improper to read limitations from a preferred embodiment described in the specification into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited[.]”).

## 2. Court’s Construction

Absent clear evidence of lexicography or disavowal, the Court finds that this term should receive its plain and ordinary meaning.

**E. “first/second on/off signal having a first/second cycle time” (’435 Patent, Claim 1) (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1) (’144 Patent, Claim 12)<sup>6</sup>**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	two or more cycles or periods for two different LEDs	Plain and ordinary meaning, in which the first on/off signal is a different signal than the second on/off signal

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<sup>6</sup> While the terms “first on/off signal having a first cycle time” and “second on/off signal having a second cycle time” appear in the claims of the ’435 Patent, different terms are used in the other patents. (Dkt. #31-1 at 27–32). The parties’ Joint Claim Construction Chart includes claims that do not use this claim term but uses the distinct phrase “an on/off signal *having a cycle time to each LED*.” (Dkt. #31-1 at 27–32). This latter term was neither identified for construction in the Claim Construction and Prehearing Statement, (Dkt. #24), nor briefed by the parties. This memorandum therefore does not construe that term.

## 1. Analysis

Gemstone argues that this term “requires different time cycles for two different LED structures.” (Dkt. #29 at 19–20). Gemstone asks, “does this claim language cover (for instance) sending the same signals to two tricolor LEDs (as Ilumi apparently asserts), or does the limitation require two different signals to two different types of LEDs (e.g., a white LED and a red LED, as Gemstone proposes)?” *Id.* The answer to this question, however, stems from other claim limitations, not from the “first/second on/off signal having a first/second cycle time.” *See supra* Part III.B.1. The Court rejects the arguments related to different LEDs for the same reasons it provided above. *Id.*

What the claim language makes clear about this term is that the first on/off signal is a different signal from the second on/off signal and that each signal has an associated cycle time. Gemstone points to no evidence of lexicography or disavowal that would require the cycle times to be of different durations.

## 2. Court’s Construction

Absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning, which requires that the first on/off signal be a different signal than the second on/off signal.

### F. “smart strip” / “flexible smart strip” / “strip” (’435 Patent, Claims 7 & 8) (’232 Patent, Claim 28) (’218 Patent, Claim 1)

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	a strip or LED strip light is a flexible circuit board that is populated	<ul style="list-style-type: none"> <li>“strip”: Plain and ordinary meaning.</li> </ul>



	with smart LEDs (as opposed to bulbs connected by wire or a cable).	<ul style="list-style-type: none"> <li>• “smart strip”: A strip populated by smart LEDs</li> <li>• “flexible smart strip”: A flexible strip populated by smart LEDs</li> </ul>
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## 1. Analysis

The parties dispute focuses on “whether the ‘strip’ can be a wire or cable, or whether it is a flexible circuit board.” *See* (Dkt. #29 at 20); (Dkt. #30 at 9–10).

To begin with, the use of the modifier “flexible” before “strip” strongly indicates that the term “strip,” standing alone, “does not inherently mean” a strip that is flexible. *Phillips*, 415 F.3d at 1314. Moreover, the specification neither uses the phrase “flexible circuit board” nor limits a strip to one. And Gemstone’s extrinsic evidence—website printouts that post-date the asserted patents—fail to establish how a POSITA would understand “strip” at the time of conception and thus don’t compel a different result. (Dkt. #29-6, #29-7, #29-8). The Court also declines to include the negative limitation that a strip cannot be a set of bulbs connected by a wire or cable. While bulbs connected only by a wire may not be a “strip” within the plain meaning of the term, strips could (and likely do) connect bulbs using wires.

The parties don’t discuss what distinguishes a “smart strip” from a “strip.” Gemstone uses the terminology “populated with smart LEDs,” which Ilumi does not appear to dispute.

## 2. Court’s Construction

For the above reasons, the Court construes “strip” to have its plain and ordinary meaning; “smart strip” as “a strip populated by smart LEDs”; and “flexible

smart strip” as “a flexible strip populated by smart LEDs.”

**G. “communicably coupled” (’435 Patent, Claim 10) (’232 Patent, Claims 1 & 11) (’694 Patent, Claims 1 & 12) (’126 Patent, Claim 1) (’218 Patent, Claim 1 & 11) (’144 Patent, Claim 1)**

<b>Illumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	a circuit that is part of a smart light strip/smart light bulb device and: 1) transmits signals to and receives signals from the controller/processor; and 2) can either be affixed to the bulb/strip or connected to the bulb/strip on the same cable or wire as the strip or bulb.	Plain and ordinary meaning.

**1. Analysis**

Gemstone frames the parties’ dispute as whether “the communication between a circuit that is part of a smart light or II device[] 1) must transmit and receive communications between that circuit and the controller/processor; and 2) whether the circuit must be affixed or connected to the smart light or II device.” (Dkt. #29 at 23). Gemstone argues the term “communicably coupled” requires both limitations.

To the extent that Gemstone relies on the superseded specification, the Court is unpersuaded for the same reasons it provided above. *See supra* Part III.A.1.i. In addition, Gemstone fails to provide any evidence of lexicography or disavowal that would limit the scope of “communicably coupled.” Although the term “communicably coupled” appears throughout the specification, there is no evidence that the patentee

intended any meaning other than its plain and ordinary meaning. *See, e.g.*, ’435 Patent at Abstract, 2:7–15, 35–44, 54–62, 3:4–10, 7:15–21.

## 2. Court’s Construction

Absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning.

### H. “the intelligent lights comprises two or more modules” Terms (’435 Patent, Claims 29 & 30)

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	the use of two or more modular components within a strip or bulb	Plain and ordinary meaning.

## 1. Analysis

Gemstone’s concern here with plain and ordinary meaning is that it “might leave open the door to ‘modules’ which are physically separate and removed from the II Device/smart light.” (Dkt. #29 at 25). Based on descriptions of embodiments in the specification, Gemstone argues that “modules” are limited to “internal components to the II Device/smart light.” (Dkt. #29 at 25). For support, Gemstone cites a handful of uses of “module” in the specification. It mainly relies on the following reference, however: “The DC/DC converter(s) 104 receives power from the AC/DC converter 102, it then converts that power to DC power(s) required for driving the internal components/modules of the II Device 140.” ’435 Patent at 8:53–56.

But Gemstone ignores the other uses of “module” in the specification. For example, the specification describes a “Bluetooth module” as part “of an external peripheral to the light, connected via wireless communication.” *Id.* at 18:5–15. When

describing an embodiment of a “modular” II Device, the specification states that modules “could be separated physically from each other.” *Id.* at 19:29–44. And the specification states that some modules may implement software as a “software module.” *Id.* at 58:45–62. Point being, the specification is replete with embodiments that contradict Gemstone’s proposed construction.

## 2. Court’s Construction

Given the scope of modular embodiments described in the specification, the Court sees no reason to constrain this claim as Gemstone requests. And absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning.

### I. “AC/DC or DC/DC power converter” (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1) (’144 Patent, Claim 1)

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	converters on the intelligent light bulb or light strip which receive alternating current and convert the current to direct current, or convert the direct current to a direct current level required to drive the intelligent light bulb or light strip	Plain and ordinary meaning, wherein AC/DC power converter means an alternating current to direct current power converter and DC/DC power converter means a direct current to direct current power converter.

### 1. Analysis

Gemstone’s arguments rely on removed language from superseded specification for the ’435 Patent. The Court is unpersuaded by those arguments for the same reasons it provided above. *See supra* Part III.A.1.i.

Turning to the '435 Patent as issued, Gemstone fails to identify any language from the asserted claims supporting its construction and fails to present any evidence of lexicography or disavowal. In addition, the specification uses these terms in their plain and ordinary sense. *See, e.g.*, '435 Patent at 8:40–43 (“The AC to DC converter 102 receives power from the connector 100 and outputs the appropriate DC power to the DC/DC converter 103, the LED current controlling 120 circuit, and LED circuit 122.”). In fact, the specification suggests that there are no such physical constraints on these power converters. *See, e.g., id.* at 8:50–52 (“The AC to DC converter *might be* housed within the connector 100 *or separate from* the connector 100, depending on the specific II Device embodiment.”) (emphases added). The specification also contemplates certain components, including power converters, which may be “remotely located with respect to the flexible strip.” *Id.* at 2:24–28, 19:52–60.

As the Court also noted in several other constructions, the limitations Gemstone seeks to import here are governed by other claim language. For example, claim 1 of the '218 Patent recites “a flexible strip,” “an electrical connector affixed to the flexible strip,” and “an AC/DC or DC/DC power converter.” The claim then expressly recites that the “AC/DC or DC/DC power converter” is “remotely located with respect to the flexible strip.” *See also* '232 Patent at Claim 28 (same). There is no basis for limiting the location of the power converters to being “on” the flexible strip, as Gemstone proposes.

## 2. Court's Construction

Absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning. The parties may, however, clarify for the jury that AC/DC power converter means an alternating current to direct current power converter and DC/DC power converter means a direct current to direct current power converter.

**J. “electrically connected to the AC/DC or DC/DC power converter” (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1) (’144 Patent, Claim 1)**

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	part of a light strip or light bulb, and is connected to the AC/DC or the DC/DC power converter within the strip or bulb via cable or wire.	Plain and ordinary meaning.

## 1. Analysis

Gemstone rehashes the same arguments here that it put forth for the above term. *See supra* Part III.I.1. The only difference between these terms is the inclusion of the phrase “electrically connected to” here. For the same reasons above, there is no evidence of lexicography or disavowal that would require all the electrically connected components to be “within the strip or bulb” as Gemstone proposes. Nor does Gemstone put forth any evidence of lexicography or disavowal that would limit the types of electrical connections to a “cable or wire.” Indeed, the specification contemplates that components may be “electrically connected to the electrical connector via a wire, a cable, or a connecting strip.” ’435 Patent at 2:21–28 (emphasis added).

## 2. Court’s Construction

Absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning.

### K. “a light emitting diode (LED) current control circuit” (’232 Patent, Claim 1) (’694 Patent, Claim 1) (’126 Patent, Claim 1) (’218 Patent, Claim 1) (’144 Patent, Claim 1)

Ilumi’s Proposed Construction	Gemstone’s Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	a PWM driver, switching or multiplexer circuitry, or light emitting diodes (LEDs) driver(s) circuitry that is part of a strip or bulb.	Plain and ordinary meaning.

### 1. Analysis

Gemstone again relies mainly on the superseded specification for the ’435 Patent to argue that current control circuit must be “part of a strip or bulb.” (Dkt. #29 at 28–29). For the same reasons it provided above, the Court is unpersuaded by this support. *See supra* Part III.A.1.i. In addition, Gemstone fails to identify any evidence of lexicography or disavowal that would limit the current-control circuit to being part of a strip or bulb. In fact, the specification contemplates that certain components, including the “LED current control circuit,” may be “remotely located with respect to the flexible strip.” ’435 Patent at 2:24–28, 19:52–60; *see also* ’218 Patent at Claim 1 (expressly reciting that certain components including “the LED current control circuit are remotely located with respect to the flexible strip”); ’232 Patent at Claim 28 (same).

And the Court similarly explained above why importing limitations related to pulse-width modification is improper. *See supra* Part III.D.1 That same reasoning applies here because no claim of the '435 Patent includes this term.

Finally, Gemstone does not argue that this term is a means-plus-function term governed by 35 U.S.C. § 112 ¶ 6, such that it should be limited to the examples of current-control circuitry that Gemstone identifies in the specification. (Dkt. #29 at 29).

## 2. Court's Construction

Absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning.

### L. “mesh network” / “a group” ('694 Patent, Claim 1) ('218 Patent, Claim 24) ('126 Patent, Claims 24 & 25)

Ilumi's Proposed Construction	Gemstone's Proposed Construction	Final Construction
Plain and ordinary meaning, no construction is necessary.	a wireless network allowing for communication from one smart light to another, with the ability to send information from that smart light to another smart light or a device application	<ul style="list-style-type: none"> <li>“mesh network”: a network of devices using a wireless communication protocol</li> <li>“a group”: plain and ordinary meaning.</li> </ul>

## 1. Analysis

Gemstone urges the same construction for both “mesh network” and “a group.” (Dkt. #29 at 30). But as Ilumi notes, (Dkt. #26 at 24), those terms are presented as alternatives in the claims. *See, e.g.*, '694 Patent at Claim 1 (“wherein the lighting device and the other devices are part of a mesh network, a group or a combination



thereof”); ’218 Patent at Claim 24 (“the mesh network or group”); ’126 Patent at Claim 24 (“a mesh network, a group or a combination thereof”), Claim 25 (“the mesh network or group”). Thus, the Court presumes “mesh network” and “a group” are different to avoid rendering the surrounding claim language superfluous.

As to Gemstone’s proposed construction, it appears to rely on limitations that are already present in the claim. (Dkt. #29 at 30). The Court finds this proposition puzzling. But in the end, it doesn’t matter because the patentee defined “mesh network” in the specification. The relevant section begins by stating, “For the purposes of discussing this invention, the following terms will be used to describe the primary aspects of the invention.” ’694 Patent 6:34–36. A few lines later, the patentee provides the following definition: “A mesh network is a wireless communication protocol” used to connect wireless enabled devices. *Id.* at 6:40–42. Taken in context, the patentee evinced a clear intent to define the term “mesh network.” Therefore, the Court finds lexicography for the term “mesh network.” On the other hand, Gemstone cites to, and the Court finds, no evidence of lexicography or disavowal for the term “a group.”

## **2. Court’s Construction**

For “mesh network,” the Court finds lexicography and construes the term to mean “a network of devices using a wireless communication protocol.” For “a group,” the Court finds no evidence of lexicography or disavowal, and finds that the term is common and would be readily understandable by a jury. Thus, plain and ordinary meaning is appropriate for “a group.”

**M. “a housing” (’144 Patent, Claim 1)**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	A unitary outer structure of a smart bulb for holding the AC/DC or DC/DC power converter, the controller/processor, and the LED current control circuit, and having LEDs at one end.	Plain and ordinary meaning.

**1. Analysis**

Gemstone’s construction relies on other claim limitations recited as being “disposed within the housing” to support its construction. (Dkt. #29 at 31) (quoting ’144 Patent at Claim 1). But the claim makes clear what must be “disposed within the housing,” so the Court need not construe the term as Gemstone proposes. In addition, Gemstone improperly seeks to read other claim limitations into the term “a housing” and seeks to add the limitation of “a unitary outer structure of a smart bulb for holding” other components. Finally, Gemstone does not identify any evidence of lexicography or disavowal and does not argue that the term is ambiguous.

**2. Court’s Construction**

Absent clear evidence of lexicography or disavowal, the Court construes “a housing” to have its plain and ordinary meaning.

**N. “one or more LEDs are affixed to the strip” (’218 Patent, Claim 1) (’232 Patent, Claim 28)**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	attached to the flexible circuit board	Plain and ordinary meaning.

**1. Analysis**

Gemstone’s proposed construction fails to capture the entire term and appears focused on the portion of the term that recites “affixed to the strip.” (Dkt. #29 at 32–33). Gemstone’s proposed construction seeks to replace “affixed” with “attached.” It neither cites nor provides any reason for this replacement. Nor does it identify any evidence of lexicography or disavowal that would require this construction. And Gemstone’s arguments here about a strip being a flexible circuit board are foreclosed by the Court’s above constructions for the strip-related terms. *See supra* Part III.F.1. As a result, no further construction is necessary.

**2. Court’s Construction**

Absent, clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning.

**O. “remotely located with respect to the strip” (’218 Patent, Claim 1) (’232 Patent, Claim 28)**

<b>Ilumi’s Proposed Construction</b>	<b>Gemstone’s Proposed Construction</b>	<b>Final Construction</b>
Plain and ordinary meaning, no construction is necessary.	located on the same cable or wire as the smart light strip, but not affixed to the strip	Plain and ordinary meaning.

## 1. Analysis

Gemstone's proposed construction again relies on claim limitations that are already present in the claim. (Dkt. #29 at 34). In addition, it seeks to improperly read limitations of embodiments in the specification into the claims. (Dkt. #29 at 34). For other limitations, like the "smart light strip," the Court isn't even sure where Gemstone discovered them: Neither the claims of the '218 Patent nor those of the '232 Patent recite "a smart light strip."

Gemstone's proposed physical constraint of being "located on the same cable or wire," (Dkt. #29 at 34), ignores other options in the claims themselves: "a wire, a cable, *or a connecting strip*." '218 Patent at Claim 1 (emphasis added); '232 Patent at Claim 28 (same). Not only does Gemstone's proposed construction read out the connecting strip as an option, but it also fails to explain how the remotely located components could be "located on the same cable or wire as the smart strip" while also being electrically connected to the electrical connector that is "affixed to the flexible strip" by a different "connecting strip."

Finally, Gemstone fails to identify any evidence of lexicography or disavowal that would require its construction. As a result, no further construction is necessary.


## 2. Court's Construction

Absent clear evidence of lexicography or disavowal, the Court construes this term to have its plain and ordinary meaning.

#### IV. CONCLUSION

The Court adopts the above constructions. The parties are ordered not to refer, directly or indirectly, to each other's claim-construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any part of this opinion, other than the definitions adopted by the Court, in the presence of the jury. The parties are also reminded that the testimony of any witness is bound by the Court's reasoning in this order but that any reference to claim-construction proceedings is limited to informing the jury of the definitions adopted by the Court.

**So ORDERED and SIGNED this 14th day of April, 2025.**



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SEAN D. JORDAN  
UNITED STATES DISTRICT JUDGE